

### **REMARKS**

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of April 21, 2006. Reconsideration of the Application is requested. Claims 1-34 remain in this application. Claims 1 and 21 are amended herein.

#### **I. The Office Action**

Claims 1-6, 15-19, 21-24, 33 and 34 stand rejected under 35 U.S.C. §102(e) as being anticipated by Allen, et al. (U.S. Patent No. 6,549,299).

Claims 7, 8, 14, 20, 25, 26, and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Allen, in view of Hower, Jr. et al. (U.S. Patent No. 5,467,434).

Claims 9-13, and 27-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Allen in view of Hower, and further in view of Neilsen (U.S. Patent No. 6,639,687).

#### **II. Rejection of Claims 1-6, 15-19, 21-24, 33 and 34 Under 35 U.S.C. §102(e)**

Claims 1-6, 15-19, 21-24, 33 and 34 stand rejected under 35 U.S.C. §102(e) as being anticipated by Allen et al. It is respectfully requested that this rejection be withdrawn for at least the following reasons. Allen et al. does not teach or suggest the subject embodiment as set forth in independent claims 1 and 21 (and claims 2-19 and 22-34 which depend therefrom).

Independent claim 1 (and similarly independent claim 21) has been amended to recite an integrated production and finishing system for producing and finishing work pieces of a job. A production device produces the work pieces of the job and a finishing device finishes the output of the production device, such finishing device being controlled separately from the production device and having at least one constraint. A production monitor controller that receives the at least one constraint from the finishing device and outputs job coordination information based solely upon constraints of the finishing device. A finishing module coordinator directs operation of the finishing device after receiving job coordination information output from the production monitor controller. Allen does not teach or suggest the subject embodiment as set forth in

independent claim 1.

In particular, Allen does not teach or suggest an integrated system for producing and finishing work pieces of a job wherein a production monitor controller receives at least one constraint from a finishing device and outputs job coordination information based solely upon constraints of the finishing device. See, e.g. paragraphs [0024] and [0032]. Instead Allen et al. discloses in column 3, lines 3-6, that the “finishing machine is a standalone machine meaning that it is not under direct control of the apparatuses being used to print document sheets.” In other words, the finishing machine is not integrated with the system and it is required for a human operator to know the constraints of the assembling/finishing machines, thus placing stacks to be finished at the appropriate machines according to the finishing details on the instruction sheets. See Allen et al. Figure 1 and column 4, lines 15-19.

Allen et al. does not expressly or inherently disclose an integrated production and finishing system, wherein a production monitor controller receives at least one constraint from a finishing device and outputs job coordination information based solely upon constraints of the finishing device. In order for a §102 rejection to be upheld, it must be shown that all elements of the claim in the application must be contained in a single prior art reference. Accordingly, Allen et al. does not contain the element of an integrated production and finishing system based as recited herein, thus distinguishing it from the claims of the present application.

Likewise, claim 21 as amended is the method by which the whole printing and assembling process is integrated. Paragraph [0024] of the present application provides that, “One aspect of the invention is a software architecture by which the assembly and finishing Phase 3 of a complex document can be managed as early as during the initial Phase 1....” This is unlike Allen et al. which teaches away from an integrated system by disclosing in column 2, lines 3-6 that the finishing machine “is not under direct control of the apparatuses (in this case computer 12 and printer 14) being used to print document sheets 20.”

Continuing to describe how claim 21 is distinguishable from Allen et al., paragraph [0062] goes on to describe the Finishing Module Coordinator (FMC), as “a software-based controller that manages, interprets, sequences, and allocates

assembler/finisher production data...the FMC communicates to each device the data required to program that device for implementation of the job." On the other hand, Allen et al. expressly illustrates in Figure 1, and column 4, lines 15-16 that a human operator is necessary to allocate printed materials to the appropriate finishing machines, because the finishing machines are "standalone."

For at least the above mentioned reasons, Allen does not teach or suggest the subject embodiment as recited in independent claims 1 and 21 (and claims 2-6, 15-19, 22-24, 33 and 34 which respectively depend therefrom). Accordingly, it is respectfully requested that this rejection be withdrawn.

**III. Rejection of Claims 7, 8, 14, 20, 25, 26, and 32 Under 35 U.S.C. §103(a)**

Claims 7, 8, 14, 20, 25, 26, and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Allen, et al. as applied to claims 1 and 21 above and further in view of Hower, Jr. et al. (U.S. Patent No. 5,467,434). It is respectfully requested that this rejection be withdrawn for at least the following reason. Allen, et al. and Hower, Jr. et al. individually and in combination, do not teach or suggest all limitations of the subject claims.

Independent claim 20 recites a **system for integrating** and controlling assembler/finishing processes. A production monitor controller separates a production job into job segments based upon the capabilities and constraints of devices to be used in the production process. At least one database stores information concerning the capabilities and constraints of devices to be used in the production process and stores job segment descriptions. A finishing module coordinator, in communication with assembler/finisher devices and with at least one database, tracks job segments during the production process.

Contrary to the reasoning stated in part 6, page 8, of the Office Action, Allen et al and Hower, Jr. et al are not obviously combinable. Section 2141 of the Manual of Patent Examining Procedure explains that when applying 35 U.S.C. §103 to reject a claim, case law has determined that "the following tenets must be adhered to:"

- (A) The claimed invention must be considered as a whole;

(B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;

(C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and

(D) Reasonable expectation of success is the standard with which obviousness is determined.

*Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

Referring specifically to the requirements of part (A) above, the Office Action does not cite a prior art reference that addresses the present invention as a whole. The Office Action reference of Hower, Jr. et al. column 5, lines 10-21 discloses "the preferred embodiment of the [ ] invention, printer profiles 44 are composed of 3 distinct segments: ...." Nonetheless, Hower, Jr. et al fails to disclose a database associated with the complex finishing process of a job that requires an auxiliary assembler/finishing machine.

The limited art taught by Hower, Jr. et al. disclosed in column 1, lines 7-11, "relates generally to...a technique for determining whether a combination of print job selections is available at a given printer having a predetermined set of printer properties." Hower, Jr. et al further discloses in column 2, lines 32-50, "the [ ] invention provides a printing arrangement of the type having a printer bank with a plurality of printers...." Accordingly, there is nothing in Hower, Jr. et al that teaches or suggest an aspect of the finishing process that requires separate assembler/finishing machines from the printers to carry out the final step of production.

In contrast, claim 20 of the present invention ***goes further than the printing functions, and describes a system for integrating assembler/finishing process***, when there is an auxiliary assembler/finishing machine. This particular operation is absent from Hower, Jr. et al. and the absence is acknowledged in paragraph [0061] of the current application:

In the prior art, where multiple printing devices are used, operators configure and operate these Phase 3 [assembling/finishing] steps separately from operations performed in each of Phases 1 and 2. Only in those instances in which all of the assembly and finishing is accomplished within a single digital printer and governed by a unified print/finisher controller does the prior art teach that Phase 3 can be configured and controlled automatically. ...

Even when automated conveyance systems are utilized, the prior art does not teach a method by which offline assembler/finisher equipment may be programmed to automatically process a complex assembly and finishing operation based upon instructions created prior to printing of sheets.

In light of part (A) from *Hodosh*, above, "the claimed invention must be considered as a whole." Independent claim 20 cannot be dismissed because a fraction of it, rather than its entirety, is referred to in the cited prior art.

For at least the above mentioned reasons, Allen et al. and Hower, Jr. et al. are not combinable as applied to the present application and do not make obvious the invention as recited in independent claim 20 and dependent claims 7, 8, 14, 25, 26, and 32. Accordingly, it is respectfully requested that this rejection be withdrawn.

**IV. Rejection of Claims 9-13 and 27-32 Under 35 U.S.C. §103(a)**

Claims 9-13 and 27-32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Allen, et al. and Hower, Jr. et al. as applied to claims 8 and 26 above, and further in view of Neilsen (U.S. Patent No. 6,639,687). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Claims 9-13 and 27-32 are dependent on independent claims 1 and 21 respectively and Neilsen does not make up for the aforementioned deficiencies of Allen, et al. and Hower, Jr. et al. as noted above. Thus, the withdrawal of this rejection is respectfully requested.

**CONCLUSION**

For the reasons detailed above, it is submitted all claims remaining in the application (Claims 1-34) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

No additional fee is believed to be required for this Amendment. However, the undersigned attorney of record hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Deposit Account No. 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Pat Roche, at Telephone Number (216) 861-5582.

Respectfully submitted,

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7/17/07  
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